Average precipitation and departures from the normal.

Districts.	Number of stations.	Average.		Departure.	
		Current month.	Percentage of normal.	Current month.	Accumulated since Jan. 1.
		Inches.		*Inches.*	*Inches.*
New England	12	2.53	66	− 1.3	− 0.9
Middle Atlantic	16	3.08	69	− 1.4	+ 0.9
South Atlantic	11	5.40	88	− 0.7	− 3.9
Florida Peninsula*	8	8.25	122	+ 1.5	+ 2.0
East Gulf	11	4.86	100	0.0	+ 7.0
West Gulf	10	2.27	76	− 0.7	+ 9.1
Ohio Valley and Tennessee	13	2.29	66	− 1.2	+ 3.0
Lower Lakes	10	2.08	70	− 0.9	+ 2.7
Upper Lakes	12	2.88	97	− 0.1	+ 0.9
North Dakota*	9	3.05	136	+ 0.8	+ 0.7
Upper Mississippi Valley	15	2.46	58	− 1.8	+ 0.6
Missouri Valley	12	1.88	56	− 1.5	+ 1.1
Northern slope	9	0.74	60	− 0.5	+ 0.8
Middle slope	6	1.16	47	− 1.3	− 2.5
Southern slope*	8	1.41	59	− 1.0	− 6.3
Southern Plateau*	11	3.06	196	+ 1.5	0.0
Middle Plateau*	10	1.45	193	+ 0.7	+ 0.3
Northern Plateau*	12	0.32	62	− 0.2	− 0.1
North Pacific	7	0.76	100	0.0	− 2.0
Middle Pacific	7	T.	100	0.0	+ 6.7
South Pacific	4	T.	100	0.0	+ 5.2

*Regular Weather Bureau and selected cooperative stations.

Average relative humidity and departures from the normal.

Districts.	Average.	Departure from the normal.	Districts.	Average.	Departure from the normal.
New England	75	− 7	Missouri Valley	64	− 3
Middle Atlantic	71	0	Northern slope	56	+ 4
South Atlantic	81	− 1	Middle slope	59	0
Florida Peninsula	82	+ 2	Southern slope	61	0
East Gulf	78	− 2	Southern Plateau	50	+ 8
West Gulf	69	− 6	Middle Plateau	47	+14
Ohio Valley and Tennessee	73	+ 1	Northern Plateau	39	− 3
Lower Lakes	68	− 3	North Pacific	74	+ 7
Upper Lakes	76	+ 1	Middle Pacific	58	− 9
North Dakota	71	+ 7	South Pacific	63	− 3
Upper Mississippi Valley	69	− 1			

Maximum wind velocities.

Stations.	Date.	Velocity.	Direction.	Stations.	Date.	Velocity.	Direction.
Block Island, R. I.	17	54	e	Pierre, S. Dak.	6	50	se.
Charleston, S. C.	16	50	nw.	Pt. Reyes Light, Cal.	20	53	nw.
Corpus Christi, Tex	27	56	e.	Do	22	54	nw.
Detroit, Mich.	15	60	nw.	Do	23	50	nw.
Indianapolis, Ind.	27	58	s.	Do	31	54	nw.
Mt. Tamalpais, Cal.	22	66	nw.	Sand Key, Fla.	24	56	se.
Pensacola, Fla.	19	63	s.	Do	25	54	se.
Do	23	60	se.	Tatoosh Island, Wash.	25	52	s.
Do	28	53	n.				

Average cloudiness and departures from the normal.

Districts.	Average.	Departure from the normal.	Districts.	Average.	Departure from the normal.
New England	5.2	+ 0.2	Missouri Valley	3.0	− 1.1
Middle Atlantic	4.6	− 0.5	Northern slope	3.2	− 0.7
South Atlantic	4.8	− 0.4	Middle slope	4.3	+ 0.5
Florida Peninsula	6.2	+ 1.0	Southern slope	4.1	+ 0.2
East Gulf	4.8	− 0.4	Southern Plateau	4.4	+ 0.7
West Gulf	3.8	− 0.2	Middle Plateau	4.0	+ 0.7
Ohio Valley and Tennessee	3.9	− 0.6	Northern Plateau	2.0	− 0.3
Lower Lakes	4.0	− 0.6	North Pacific	4.2	− 0.4
Upper Lakes	5.1	+ 0.4	Middle Pacific	2.9	− 0.7
North Dakota	3.3	− 0.7	South Pacific	1.8	− 1.0
Upper Mississippi Valley	3.4	− 0.8			

RAINFALL IN JAMAICA.

Through the kindness of Mr. Maxwell Hall, meteorologist to the government of Jamaica and now in charge of the meteorological service of that island, we have received the following data:

Comparative table of rainfall.

[Based upon the average stations only.]

AUGUST, 1909.

Divisions.	Relative area.	Number of stations.	Rainfall.	
			1909.	Average.
			Inches.	*Inches.*
Northeastern division	25	17	8.60	7.57
Northern division	22	41	6.15	4.44
West-central division	26	20	10.78	9.52
Southern division	27	26	7.03	5.20
Means	100		8.14	6.68

The rainfall for the island for the month of August was therefore an inch and a half above the average. The heaviest rainfall, 19.90 inches, was recorded at Glasgow Estate, and the least was 1.23 inches, at Pedro Plains.

RIVERS AND FLOODS.

There were no floods of great consequence in the United States during the month. Heavy rains from the 1st to the 3d, inclusive, over the South Atlantic States caused decided rises in the rivers of the Carolinas and Georgia and flood stages in the Wateree and Santee rivers. Warnings were issued in ample time to protect all interests, and no damage was done as the waters were not sufficiently high to injure crops.

The great rivers of the country fell steadily, as a rule, but there was sufficient water for purposes of navigation in nearly all localities.

Torrential rains in the mountain districts of Colorado, New Mexico, and Arizona, from the 16th to the 18th, were soon followed by swollen streams that filled the canons and arroyos, and overflowed banks generally. In some places in the Canon of the Arkansas River in Colorado the stages were the highest of record, and the total losses were about $250,000, divided as follows:

Property other than crops	$170,000
Crops	25,000
Soil erosion, or deposit	5,000
Suspension of business	50,000
Total	$250,000

As is usual in floods of this character, the railroads were the principal sufferers. Owing to the extreme rapidity with which these mountain floods originate and move, it is impossible to forecast their approach, and therefore there were no warnings issued except for that portion of the Arkansas River from Salida to Pueblo, Colo.

The terrible disaster that visited the city of Monterey Mexico, on August 28 was due to an enormous rise in the Santa Catarina River that traverses the narrow valley in which the city of Monterey is situated. A tropical storm that had moved across the Gulf of Mexico and had reached the mainland on the 27th was the exciting cause, and for three days an enormous